

CHAPTER 13

DEMILITARIZATION AND DISPOSALA. GENERAL POLICIES AND PROCEDURES

This chapter outlines the policies and procedures used by the SMCA and the Military Services to ensure optimum performance of conventional ammunition demilitarization and disposal functions and facilities. It applies to the SMCA organizations responsible for the custody, control, technology development, processing, and funding for conventional ammunition demilitarization and disposal. The SMCA and the Military Services shall, consistent with DoD policies and procedures, establish and support the management system described in this chapter for processing disposable assets.

1. Demilitarization and Disposal Concepts. Demilitarization and disposal is the final step in the life-cycle management of ammunition. Assets requiring demilitarization and disposal are generated at most sites that receive, store, ship, maintain, or use conventional ammunition.

a. Disposable assets are items either declared excess to the Military Services' needs or determined to be unserviceable. To maximize the return on the DoD investment in such items, they must be processed through a systematic procedure to ensure reutilization, transfer, sales, or demilitarization.

b. Demilitarization and disposal methods and procedures must be incorporated into the design and development of new or modified ammunition items. This technology must provide acceptable methods that comply with applicable environmental requirements.

c. Demilitarization and the subsequent sale of scrap is one of the final acts in the disposal process. The most efficient disposal system for conventional ammunition under optimum conditions is one that could be used worldwide, since disposable assets may be generated in either the wholesale or retail inventories.

d. The management system used by the SMCA and the Military Services shall include the following requirements to ensure efficiency, economy, and the maximum return for the DoD dollar:

(1) An automated accounting and reporting system or systems providing visibility and management reports of all conventional ammunition authorized for disposal. The system(s) must record and report items and materials reclaimed during the demilitarization and disposal processing cycles.

(2) A method of identifying and providing visibility of all SMCA and Military Service activities' capabilities to demilitarize items in the disposable conventional ammunition inventory.

(3) A decision model or models to aid managers in analyzing and decision making on various tradeoff alternatives, such as relocating assets for demilitarization versus demilitarization at the generating activity, considering all related costs.

(4) A management information system of ongoing research, development, engineering, and modernization projects for new or improved disposal techniques. The purposes of this requirement are to avoid duplication of effort, identify areas requiring research, and achieve a higher degree of efficiency and compliance with environmental requirements.

(5) Inclusion in the design of all new or modified conventional ammunition items the requirement to develop safe and environmentally acceptable demilitarization procedures.

2. Developing and Maintaining Demilitarization and Disposal Policies and Procedures. The JOCG Demilitarization and Disposal Functional Group develops and periodically reviews this chapter. The group chairperson is responsible for inter-Service coordination of required changes.

a. The JOCG Demilitarization and Disposal Functional Group Membership. The principal Military Service members are as follows:

(1) **Army**

(a) Armament Research and Development Center: **AMSMC-LC(D).**

(b) **AMCCOM: AMSMC-DS(R) .**

(c) **MICOM: AMSMI-NL.**

(2) **Navy** NAVSEASYS COM/SEA-642 .

(3) **Air Force**

(a) **OO-ALC/MMW.**

(b) **AFSC/AD/DLV.**

b. Principal Member Responsibilities. The principal members of the **JOCG** Demilitarization and Disposal Functional Group shall:

(1) Develop and maintain instructions for demilitarization and disposal of ammunition as defined in this chapter.

(2) Coordinate the exchange of demilitarization and disposal information of mutual interest and concern.

(3) Analyze the impact of information exchanged and make recommendations to the appropriate commands.

(4) Establish required interfaces to accomplish assigned tasks.

(5) Perform special task assignments as directed.

(6) Resolve differences of opinions involving elements of their respective Military Services.

B. FINANCIAL MANAGEMENT

This section applies to the financing of conventional ammunition demilitarization and disposal technology development and operations.

1. Storing Military Service Responsibilities. The storing Military Service shall, in accordance with Chapter 7, fund for demilitarization and disposal functions performed at its activities as storage space availability and economic analysis dictate.

2. SMCA Responsibilities. The SMCA shall:

a. Fund for demilitarization and disposal of materiel at SMCA activities.

b. Provide the Military Services by August 1 of each year a 5-year forecast of technical data requirements for Military Service-peculiar items to be demilitarized at SMCA activities. Examples of such technical data include **DMWRs**, TOS, and LOIs.

c. Provide the Military Services an annual confirmation by March 30 of Military Service-peculiar items scheduled to be demilitarized at SMCA activities for which technical data are required by March 30 the following year for processing during the ensuing FY. That is, on March 30, 1988, notification of technical data requirements to be provided by March 30, 1989, will be made for work to be done in FY 90.

d. Fund for development of demilitarization and disposal technology and preparation of **DMWRs** for all materiel in the inventories before November 1, 1977, after receipt at SMCA facilities. (Note that lack of such technology is not sufficient reason to defer shipment.)

e. Fund for packaging, crating, handling, and transportation costs for disposal assets shipped to other **Military** Service-designated demilitarization sites from SMCA activities.

f. Program and fund for equipment and facilities required to support the SMCA-demilitarization and -disposal mission.

3. Military Services' Responsibilities. The Military Services shall:

a. ~~Provide~~ Provide the SMCA a 5-year forecast by March 30 each year of those **disposable** conventional ammunition assets projected to be referred to the SMCA for designation of a demilitarization site.

b. Provide the **SMCA** an annual confirmation by March 30 of retail disposable assets to be referred to the SMCA during the ensuing **FY**. Forecasts shall be in the format agreed to between the SMCA and the Military Services.

c. Fund for **packaging, crating, handling, and transportation** costs for disposal assets **shipped** from-other than **SMCA** facilities. "

d. Fund for the development of demilitarization and **disposal** technology for new or modified items entering the Military Services' supply systems after November 1, 1977.

e. **Program** and fund for **equipment** and facilities **required to** support the **Military** Services' **assigned** demilitarization and-disposal missions.

4. Additional Financial Management Considerations

a. When disposal assets are received at the SMCA-designated location, they become part of the wholesale inventory. Funding for receipt, processing, demilitarization and disposal, or subsequent movement to another location shall be the responsibility of the **SMCA**.

b. Costs incurred during the demilitarization process for preserving; packaging; renovating; or modifying and shipping or storing parts, components, or subassemblies reclaimed for further use **shall** be borne by the Military Service **IM** or organization requiring the items.

c. Military Service-owned items stored at SMCA or other Military Service-managed activities authorized to perform demilitarization and disposal shall be transferred to the disposal inventory at the storage site.

d. The JOCG Demilitarization and Disposal Decision Models may be used to support decisions on operation of demilitarization and disposal programs.

e. The detailed financial management procedures to be followed shall be in accordance with the Department of Defense, the individual Military Service, and the SMCA comptroller doctrine, in addition to the instructions in this chapter.

C. BUDGETING AND WORK LOADING

1. Concepts

a. In general, the disposal or demilitarization of disposable assets should be done at the site affording the least total DoD costs.

b. The proposal to establish any new demilitarization capability at an installation must include an economic analysis and an analysis of the environmental consequences of such an action (DoD Directive 6050.1 and implementing Military Service instructions).

2. Policies

a. ~~The Military~~ The Military Services shall budget, assign work load, and perform **demilitarization** and disposal operations on retail disposable assets for which they have such capability, as storage space availability permits, and within funding constraints dictated by economic analysis. Retail disposable assets for which there is no demilitarization and disposal capability shall be processed according to section D., below.

b. The SMCA shall budget, assign work load, and perform demilitarization and disposal operations, within funding constraints, on disposable assets at **SMCA** facilities. This shall include consideration of the Military Services' forecasts specified in section B., above.

c. The Military Services and the SMCA may use the Demilitarization and Disposal Decision Models to aid in selecting disposal sites. If a model's proposal to ship materiel from one location to another is accepted, the Military Services or the SMCA shall request data verification from the two locations.

3. Budgeting and Work Loading Procedures

a. **Budgeting.** The Military Services and the SMCA shall plan, **program, and** budget for ammunition demilitarization and disposal according to DoD and Military Service PPBS procedures. In addition, the following guidance applies:

(1) Equipment purchases (including pollution abatement equipment) and minor construction projects for disposal functions should be kept to a minimum consistent with environmental constraints and efficient operations:

(2) The economic and environmental aspects of the budget request must be evaluated before submittal. A statement on the results of the evaluation must accompany each project budget request.

(3) The budget request should cover all funds needed for receipt, processing, accounting and reporting, demilitarizing, and disposal processing. The latter includes packing, crating, handling, and shipping costs to designated disposal sites. The budget request should address both disposable assets and classified inert material received to each **SDPDA**.

b. Work Load Calculations. These are based on each activity's capability to demilitarize both existing assets and forecast generations. Five-year plans resulting from these calculations are used by the program manager to project funding requirements for budget submissions. Work loading of disposable assets held on SDPDAS generally is based on the holding activity's capability to demilitarize the assets. If no Military Service capability exists, refer to section D., below. When Military Service capability does exist, prioritizing of demilitarization projects should consider the following factors:

- (1) Safety.
- (2) Reclamation of usable components.
- (3) Storage requirements.
- (4) Recycling of salable residue.
- (5) Economics.
- (6) Environmental considerations.

D. REPORTING OF DISPOSABLE ASSETS

The SMCA is responsible for demilitarization and disposal of assigned wholesale assets stored at Army activities. In addition, the **SMCA** also is responsible for demilitarization and disposal of assigned ammunition shipped from a Military Service activity to an SMCA site for the specific purpose of demilitarization and disposal. Section B., above, described the requirements for forecasting generation of disposable assets within the retail system. This section sets up reporting requirements to be used by the Military Services and the SMCA in day-to-day control of disposable assets.

1. Requirements of Reporting Systems. The conventional **ammunition** demilitarization and disposal inventory shall be controlled through a reporting structure that:

a. Provides visibility of demilitarization and disposal inventories worldwide and Military Servicewide. The purpose of this requirement is to achieve the most efficient and economical management of demilitarization and disposal capabilities.

b. Supports the needs of the SMCA and the Military Services in fulfilling their responsibilities to manage the wholesale and retail inventories of disposable ammunition.

c. Uses existing Military Service reporting systems as much as possible!

d. Promotes reutilization and reclamation of ammunition items--- or components derived from demilitarization and disposal by the Military Services or other Federal agencies. This is in addition to the utilization screening requirements for specific ammunition FSCS prescribed in DoD 4160.21-M.

e. Affords the same inventory accountability, control, storage, and security measures for ammunition in the disposal account as for Military Service stock.

f. Provides communications between reporting systems adequate to satisfy the needs of the SMCA and the Military Services.

2. How the Reporting System Works

a. Excess serviceable or reparable retail assets are referred to the other Military Services by the owning Military Service **IM** for possible reuse before authorizing demilitarization and disposal and transfer to an SMCA or Military Service SDPDA.

b. Transfer to the demilitarization and disposal account starts when the **DD** Form 1348-1, "DoD Single Line Item Release/Receipt Document," is issued to transfer accountability to the **SMCA** or Military Service SDPDA.

c. The SAPDOS of the SMCA and the Military Services provide input to and update of the demilitarization and disposal inventory according to their respective reporting systems.

d. Processing of Military Service disposable assets is as follows:

(1) Army. Assets declared excess or unserviceable at retail sites are **reported to** the Army ICPS to provide worldwide visibility of disposable stocks. Input on wholesale disposable assets is provided to the SMCA .

(2) Navy. Retail assets authorized by the **IM** for disposal are demilitarized locally, if possible. Local demilitarization and disposal capability may not exist, or local demilitarization and disposal may be uneconomical. In such cases, the items are reported to the Navy **Ammunition Demilitarization and Disposal Program Manager** for transfer to another activity or referral to the SMCA for demilitarization and disposal at an SMCA-designated activity.

(3) Air Force. Retail assets authorized by the **IM** for disposal are demilitarized locally, if possible. If local demilitarization is either not possible or uneconomical, the items are referred to the **SMCA** for demilitarization and disposal at an SMCA-designated activity.

e. Military Service-owned assets stored at the SMCA or other Military Service-managed activities and authorized for demilitarization and disposal by the owning Military Service **IM** are transferred to the SMCA or Military Service **SDPDA** located at the storage activity.

E. THE DEMILITARIZATION AND DISPOSAL MIS

The information provided through the reporting systems discussed in the preceding section is used to support SMCA and Military **Service** decision processes. In order to do this effectively, the information must be current, organized, and accessible. The Demilitarization and Disposal MIS described in this section is set up to fulfill those requirements.

1. Sources of Data

a. The Army and **SMCA-owned** activities provide inventory entries or changes according to established Army reporting systems.

b. The Navy provides the SMCA updates on the Navy's retail disposable ammunition inventory by means of the Ammunition Disposal Inventory Management System.

c. The Air Force uses existing procedures to transfer **accountability** to the SMCA as materials are designated for demilitarization and disposal. The SMCA enters this data into the MIS.

2. Demilitarization and Disposal MIS Outputs

The SMCA establishes, operates, and maintains the Demilitarization and Disposal MIS in collaboration with the Military Services. Included in this responsibility is the requirement to publish the three documents described below:

a. Volume I, "Demilitarization/Disposal Inventory," is produced quarterly. It lists and stratifies the inventory.

b. Volume II, "Demilitarization/Disposal Facility Capability Handbook," is produced as required. It shows capabilities, constraints, and **common** usage equipment.

c. Volume III, "Demilitarization/Disposal Reclamation Materials and Weights," is also produced as required. It is a catalog of reclamation materials and shows amounts by weight.

3. Procedures for Operating and Maintaining the MIS. The SMCA collects and processes input data from SMCA and Military Service sources and publishes and distributes the three MIS publications as follows:

a. Volume I includes the following:

(1) **NSN/DoDAC.**

(2) Nomenclature.

(3) Storage location.

(4) Quantity.

(5) Total weight.

(6) Total dollar value.

(7) Condition code.

(8) The inventory stratification by total weight of each inventory quantity to facilitate any required operations planning and shipment quantities.

(9) Inventory data sources that include quarterly reporting through the SPEDEX system for **DESCOM** and **AMCCOM** installations, as well as the Military Services' internal reporting systems. Volume I provides quantitative data for the Ammunition Disposal Inventory Management System quarterly.

b. Volume II includes the following:

(1) A master cross-reference relating capabilities and capacities to **NIINs**.

(2) Demilitarization and disposal facility capabilities expressed in terms of methods (such as deactivation furnace, washout, demolition, burning, and so forth), by item, location, unit volume, and direct labor costs.

(3) Ammunition demilitarization data sheets for selected ammunition items listed in the demilitarization and disposal inventory. The data sheets are prepared by the Military Services and SMCA depots and plants and reviewed by **AMCCOM** and NAVSEA, as appropriate.

(4) Information provided by the Military Services and SMCA depots and plants on changes in environmental constraints affecting demilitarization and disposal capabilities at the various activities. Before this change information is entered in Volume II, it must have been reviewed by **AMCCOM** and **NAVSEA**, as appropriate.

(5) Common usage equipment available to meet demilitarization needs. To obtain information on such equipment and get approval to use nonstandard or locally fabricated equipment, contact either of the following, as appropriate:

(a) **SMCA:**
AMCCOM
AMSMC-DS(R)
Rock Island, IL 61299-6000

(b) **NAVSEA:**

NAVSEASYSKOM
SEA-6423
Washington, DC 20362

c. Volume III shows the information in the following format:

(1) **DoDAC.**

(2) Nomenclature.

(3) Weight of the materials in pounds per item. Source data for all information on reclamation materials and weights on all ammunition items in the demilitarization and disposal inventory is provided by the SMCA and the Military Services.

d. Demilitarization and disposal publications comprising the **MIS** are distributed according to requirements set up by the SMCA and Military Service Demilitarization and Disposal Functional Group principal members.

F. DEVELOPING TECHNICAL PROCEDURES AND INSTRUCTIONS

Demilitarization and disposal by safe and environmentally acceptable means shall be a mandatory consideration in the design concept of new or modified ammunition items. This means such considerations and procedures must be incorporated into the design and development of new or modified items to achieve compliance with applicable safety and environmental requirements. Such considerations include disassembly, recovery, and

salvage of **ammunition** components for reuse or conversion to other applications. **Ammunition** items to be demilitarized at SMCA activities may not have demilitarization and disposal procedures, or the existing procedures may be inadequate due to safety or environmental constraints. In such cases, the SMCA shall request the developing Military Service to provide the necessary technology and procedures. If the owning Military Services do not have the capability to do so, the SMCA shall initiate the needed technology development with SMCA development centers or industry. If demilitarization procedures are needed for items to be demilitarized at Military Services' facilities, those Military Services are responsible for developing the procedures.

1. Objectives of Technology and Procedures Development for Demilitarization and Disposal

a. Includes demilitarization and disposal considerations as integral parts of the planning and decision processes for all new or modified **ammunition** items from conception to final acceptance of the end item.

b. Provides for review and approval of demilitarization and disposal considerations and plans according to program management procedures. In all cases, this should be done before **OT&E**.

c. Ensures demilitarization and disposal procedures that meet environmental requirements are developed and tested before inventory production decisions.

d. Ensures a hazard analysis is conducted. Safety must be a primary consideration in developing demilitarization and disposal procedures.

e. Achieves maximum attainable recycling of resources used in **ammunition**.

2. Responsibilities for Demilitarization and Disposal Technology

a. Activities, **commands**, divisions, centers, and program offices responsible for **ammunition** development or modification shall:

(1) Ensure demilitarization and disposal considerations are an integral part of the planning and decision processes for all new or modified **ammunition** items.

(2) Prepare **ammunition** demilitarization and disposal "plans and test reports."

(3) Provide for review and approval of demilitarization and disposal considerations and plans through existing command channels before **OT&E**.

(4) Provide an approved disposal plan to the SMCA for all new or modified ammunition to be produced, stored, **demilitarized**, or disposed of by the SMCA.

(5) Issue appropriate regulations, instructions, and procedures to implement the policies and procedures in this section.

b. The JOCG shall:

(1) Review implementation of these policies and make **recommendations** to the JLC, as appropriate.

(2) Check compliance by reviewing at least one demilitarization and disposal plan per year for each Military Service for a new or modified ammunition item. The **ammunition** items to be reviewed are based on command recommendation or JOCG selection.

3. Procedures for Developing Demilitarization and Disposal Technology and Procedures

a. To ensure requirements are scheduled and prepared according to **paragraph F.1.b.**, above, the Military Services shall evaluate new and revised technical procedures **for demilitarization**. They coordinate with SMCA facilities and appropriate headquarters elements to ensure adequate planning for both current and future requirements.

b. Before SMCA authentication of technical procedures for new or nonroutine demilitarization and disposal operations to be performed at SMCA activities, the following actions are required:

(1) Before full-scale operations are started, the SMCA and the involved Military Service shall conduct a pilot checkout according to the instructions in the draft technical procedures.

(2) After the pilot checkout, the test results and generated data are evaluated. The results of this evaluation are used to correct deficiencies in operational, environmental, and safety procedures when preparing the final technical procedure for distribution.

(3) If assets are not **available** to conduct a pilot checkout, the draft procedure is sent to one or more activities likely to perform the **operation** for review and comment. This must be **accomplished** before the final preparation and authentication of the technical **procedure**.

c. The SMCA shall:

(1) **Identify specific** requirements for technical procedures and set up effective **controls** for **their** use consistent with **the** requirements of the individual Military Service and the **SMCA**.

(2) Develop plans to control the joint Military Service and **SMCA checkout of** technical procedures consistent with identified requirements.

(3) Review the impact of the technical procedures on SMCA resources, scheduling, and depot work load forecasting, including resolution of onsite problem areas and manual checkout.

(4) Conduct pilot demilitarization and disposal operations with the participation of depot and Military Service personnel for new or modified items entering the stockpile. This includes taking part in prototype demilitarization and disposal operations when requested by the Military Services.

(5) Review and check out technical procedures provided by the Military Services, to ensure they can be adapted to the SMCA activities.

(6) Initiate technical studies to forecast requirements for the following:

(a) Replacing obsolete, unserviceable, and irreparable demilitarization equipment.

(b) Acquiring new demilitarization equipment for new ammunition items and accessories for existing equipment, modifying equipment, and stocking repair parts.

(c) Evaluating the progress of projects to acquire demilitarization equipment and providing any required assistance to meet delivery schedules.

(7) ~~Manage, design, control,~~ and produce or procure demilitarization **equipment specified in** technical procedures to support assigned programs.

d. Technical procedures for demilitarizing new or modified Class V (FSG 13) items must be prepared and distributed before release of the items to the stockpile.

The Director of Defense Ammunition, AMCCOM, is the SMCA point of contact on matters related to demilitarization and disposal technology.

G. REPORTING REQUIREMENTS FOR DEMILITARIZATION AND DISPOSAL TECHNOLOGY

To ensure effective communications on demilitarization and disposal technology, this section sets ~~up reporting~~ requirements and procedures. The objectives are to achieve **inter-Service coordination**, eliminate **duplication** of effort, and ensure all such projects are directed toward solving real demilitarization and disposal technology problems.

1. Responsibilities for Technology Reporting

a. The SMCA shall publish demilitarization and disposal reports, **as** required.

b. The JOCG Demilitarization and Disposal Functional Group shall maintain, update, and evaluate the demilitarization and disposal technology base before publication of the reports. This includes maintaining the data base for demilitarization and disposal technology concept proposals, ongoing **RD&E**, military construction, and engineering projects directed toward new or improved demilitarization and disposal techniques; identification and analysis of these projects; and distribution of the information.

2. Procedures for Technology Reporting

a. In advance of planned report **publication** dates, the **princi-**pal members of the JOCG Demilitarization and Disposal Functional Group retrieve pertinent demilitarization and disposal **RD&E** projects from the Defense Technical Information System.

b. The Demilitarization and Disposal Functional Group principal members correspond with appropriate agencies to obtain completed **DD** Form 2360, "Conventional Ammunition Demilitarization and Disposal Technology Description" (figure 13-1.), on **non-RD&E** efforts, including military construction and engineering projects. The required entries on the **DD** Form 2360 are self-explanatory.

c. The Demilitarization and Disposal Functional Group principal members compile, review, and analyze the data before its incorporation into the report.

d. The SMCA enters the updated technology data into the system and publishes the Demilitarization and Disposal Technology Report, as required.

e. The SMCA transmits the report to the Military Services, requesting they make provisions in their 5-year programs to fill demilitarization and disposal technology gaps in areas where the Military Services have design control.

I-i. HANDLING AND TRANSPORTING OF DISPOSABLE ASSETS

1. Basic Requirements for Transporting and Handling Disposable Assets. Handling and transporting disposable assets, including transportation safety and security, shall be according to DoD and DoT requirements.

a. All documentation required by this section shall be prepared in **MILSTRIP/MILSTRAP** formats.

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|-------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--|--------------------------|---------------------------------------------------------------------------------|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CONVENTIONAL AMMUNITION DEMILITARIZATION AND DISPOSAL TECHNOLOGY DESCRIPTION | | | | | REPORT CONTROL SYMBOL ML (AR) 1688 | |
| 1. TITLE | | | | | | |
| 2. TYPE (X one) | | | | 3. STATUS (X <input type="radio"/> s <input checked="" type="radio"/> plicable) | | |
| <input type="checkbox"/> | a. OPEN BURNING | | <input type="checkbox"/> | b. INCINERATION | | (if research, X one of the following) (1) PILOT (2) FULL SCALE (List scheduled or operational date, size <input checked="" type="radio"/> dlocation(\$).) |
| <input type="checkbox"/> | c. RECLAMATION | | <input type="checkbox"/> | d. WASHOUT | | |
| <input type="checkbox"/> | e. DETONATION | | <input type="checkbox"/> | f. WASTE TREATMENT | | |
| <input type="checkbox"/> | g OTHER (Specify) | | <input type="checkbox"/> | d. ENGINEERING DEV. | | |
| 1. SPONSOR(S) | | | | 5. RESEARCH, DEVELOPMENT AND / OR ENGINEERING AGENCY | | |
| DESCRIPTION (Use additional narrative <input checked="" type="radio"/> nddiagram sheets <input checked="" type="radio"/> s necessary .) | | | | | | |
| PREPARED BY | | | | | | |
| TYPED OR PRINTED NAME (Last , First, Middle Initial) | | | | b. SIGNATURE | | |
| ORGANIZATION NAME | | | | d. TITLE | | e DATE SUBMITTED (YYMMDD) |
| ORGANIZATION ADDRESS | | | | | | |

b. Military Service transportation and traffic management elements shall plan for and execute transportation of retail disposable assets to SMCA-designated locations for demilitarization and disposal. This includes transporting bulk propellants and explosives, other components, and end items owned by that Military Service.

c. Packing of disposable assets shall be according to DoD and DoT requirements.

d. The shipper is responsible for all transportation costs incurred in relocating disposable assets to a designated disposal site and for any **demurrage** costs resulting from the shipper's failure to conform to specific SMCA or Military Service shipping instructions. The shipper shall be promptly advised when demurrage charges occur and shall be billed by SF 1080 as incidents occur.

2. Handling and Transportation Procedures

a. The shipping Military Service shall:

(1) Request the SMCA or receiving Military Service to designate demilitarization and disposal sites, and to provide shipping information for disposable assets.

(2) Coordinate shipping information directly **with** the receiving activity, when necessary.

(3) Control shipment and movement from the time the **ship-**ment is released to the carrier at the shipping activity.

(4) Prepare and submit all documentation **required** in support of rate negotiations with the IMMC.

(5) Prepare and transmit all RESHIPS on all **ammunition** and components (CONUS and **OCONUS**) to the **ICP** consignee or other addressees, as directed.

(6) Provide the receiving activity with one copy of each GBL issued to move disposable assets.

b. The SMCA shall:

(1) Direct shipment of disposable assets from one SMCA activity to another.

(2) Designate demilitarization and disposal activities to receive and process disposable assets.

c. Receiving activities shall:

(1) Provide to the shipping activity a signed and dated copy of the shipping document acknowledging receipt and acceptance of accountability and marked according to the owning Military Service's direction.

(2) Annotate the returned document to show any difference in quantity or material actually received from that indicated on the shipping document. This is to facilitate investigation of discrepancies in shipment and any required inventory adjustments.

I. MODERNIZATION AND EXPANSION

This section outlines forth policies and procedures for modernizing and expanding ammunition demilitarization and disposal capabilities and facilities.

1. Modernization and Expansion Policies

a. Existing demilitarization and disposal capabilities, facilities, and equipment shall be used to the maximum possible extent, consistent with environmental constraints and considering economic trade-offs. An obvious tradeoff would be one based on cost comparisons between moving a disposable asset from a storage site to a location that has demilitarization and disposal capability and investing in such capability at the storage site.

b. Research, development, engineering, and modernization projects and programs to provide more economical or environmentally acceptable means of ammunition demilitarization and disposal shall be coordinated and supported jointly by the Military Services.

c. Modernization and expansion proposals shall include a statement certifying that the project does not duplicate any other ongoing or proposed projects, including those contained in the Demilitarization and Disposal Technology Report.

d. Modernization and expansion of demilitarization and disposal capabilities **shall be according to** DoD Directive 5160.65.

2. Modernization and Expansion Procedures

a. The SMCA and the Military Services jointly **shall**:

(1) Identify, document, **and** prioritize modernization and expansion requirements based on the following:

(a) Approved demilitarization and disposal plans generated by the **SMCA** or received from the Military Services.

(b) **Recommendations** from the current **Demilitarization and Disposal Technology Report**.

(c) Data and information produced by the MIS discussed in section E., above.

(d) The results and **recommendations** of special studies.

(e) TOPS for items with no known demilitarization and disposal technology.

(2) Determine the need for new or expanded demilitarization and disposal capability in support of their respective missions. The need for new or expanded capabilities is based on current and forecast demilitarization **and** disposal requirements as determined by the SMCA and the Military Services.

(3) Program for facility construction, as needed.

b. The Military Services shall:

(1) Identify equipment requirements to the SMCA for replacing worn or obsolete assets.

(2) Coordinate equipment requirements with the SMCA to **prevent duplication of existing equipment or equipment in the design process.**

c. The SMCA shall:

(1) Program for demilitarization and disposal equipment to support the SMCA mission and retail operations requirements identified by the Military Services.

(2) On a reimbursable basis, provide available APE from the SMCA inventory to satisfy the Military Services' needs.

J. UTILIZATION AND SALE OF DISPOSABLE ASSETS

This section sets up general guidance, based on established DoD policy, for **disposing** of conventional ammunition through utilization within the Federal Government, the commercial sector, and FMS as the most economical and expeditious methods of disposal.

1. Policies for Utilization and Sale of Disposable Ammunition Assets. The basic requirements, policies, and procedures governing the utilization and sale of conventional **ammunition** are contained in DoD 4160.21-M, and DoD 4160.21-M-1. In addition to that guidance, the following sales policies apply to the utilization and sales of disposable ammunition assets:

a. Every effort shall be made to ensure that actions taken on disposable assets provide the maximum return on the DoD dollar invested.

b. Every effort shall also be made to dispose of both serviceable and unserviceable conventional ammunition through reutilization and the various sales programs to promote cost-effective and expeditious disposition.

c. Statutory and regulatory controls limit the disposal of conventional ammunition by sale; however, sales may be made to state and local law enforcement agencies, **commercial** firms licensed by the Government to purchase and process explosives, and approved foreign governments.

(1) Sales to commercial firms in the United States generally are limited to unclassified conventional ammunition, unused or reclaimed bulk explosives or propellants for reprocessing and use, or munitions items that can be demilitarized according to DoD requirements.

(2) Sales in foreign countries generally are limited to firms licensed by foreign governments to process munitions according to stipulations in host nation agreements between the foreign governments and the U.S. Government.

2. Responsibilities for Utilization and Sale of Disposable Ammunition. The SMCA and Military Service demilitarization and disposal program managers shall develop detailed procedures to dispose of excess and surplus conventional ammunition expeditiously and economically through effective utilization and sales programs. Program managers are responsible for the following:

a. Establishing and maintaining liaison with the DPDS and Military Service international logistics organizations to ensure that current **commercial** and foreign military sales requirements are known.

b. Coordinating sales between the DPDS, SMCA, and the Military Services, to maximize consolidation of salable material, thereby expediting disposal action at minimum expense.

3. Procedures for Utilization and Sales of Disposable Assets. Procedures must be established to ensure all disposable conventional ammunition is screened against known and potential commercial and FMS before performing in-house demilitarization and disposal. Liaison with international **logistics organizations** must be established and maintained for the purpose of obtaining data on current requirements for **commercial** and FMS.

a. **All disposable** surplus ammunition must be reviewed for possible **sale**, with particular emphasis on the following categories:

(1) Material for which no in-house demilitarization and disposal capability exists.

(2) Material that can be demilitarized in-house only by open burning or detonation.

(3) Material that cannot be demilitarized and disposed of in-house economically. This includes, for example, situations in which demilitarization costs, including transportation and handling, exceed projected proceeds from the sale of residual material and scrap generated from demilitarization and disposal processes.

b. When specific items are identified as required for FMS, demilitarization and disposal program managers develop "packages" or "lots" of material to be offered on an "all or none" basis to interested governments. These packages or lots should include desirable and required items, together with other material from the three categories described in paragraph J.3.a., above. When necessary to develop a full "shipload package," try to include material at several locations in order to minimize the purchasers' ocean transportation costs.

c. Program managers conduct economic analyses for the alternative disposal methods (such as sales versus in-house demilitarization and disposal) to compare projected costs before sending sales offerings. At a minimum, these analyses should include the following cost factors:

- (1) Removal from storage.
- (2) **Unpackaging** for demilitarization or packaging for sale.
- (3) On-station handling and transportation.
- (4) Off-station transportation.
- (5) Port receipt and handling costs.
- (6) Shipboard loading costs.
- (7) Demilitarization costs.
- (8) Processing inert residue to the Defense Property Disposal Officer.
- (9) Packaging reclaimed explosives and propellants for sale.
- (10) **Outloading** reclaimed explosives and propellants on purchasers' carriers.
- (11) The costs for continued storage, surveillance, security, and record keeping until in-house demilitarization and disposal can be accomplished.

d. Analysis may show that while sale is less expensive than in-house demilitarization and disposal, the proceeds from sale of the material cannot be anticipated to cover all sales costs. In such cases, sales often will be less costly to the Government than in-house demilitarization and disposal, and should be pursued as an overall cost avoidance rather than a profit making effort.

e. FMS packages sent for action should contain recommended sale prices designed to recoup all sales expenses. The packages should contain at least the item's NSN, brief nomenclature, quantity, serviceability, and weight. The final sales price then can be negotiated downward, while still retaining sale as the least expensive alternative to the U.S. Government for disposal of the material. Refer to DoD 7290.3-M, chapter 7, for specific guidance on the final FMS sales price for excess ammunition items.

K. DOCUMENTATION OF DEMILITARIZATION AND DISPOSAL PROCESSES, PROCEDURES, TOOLS, AND EQUIPMENT

This section identifies sources of documents required for the demilitarization and disposal of conventional ammunition.

1. Organizations This Section Applies To

a. Development **commands**, centers, and activities of the Military Services, including their contractors, engaged in design or redesign of conventional ammunition items and components.

b. Logistics activities of the SMCA and the Military Services engaged in design or redesign of equipment for demilitarization and disposal processes, including the development of related tools, equipment, and procedures.

c* Logistics activities engaged in planning and executing demilitarization and disposal plans, programs, and operations.

2. Demilitarization and Disposal Source Documents. Demilitarization and disposal documents prepared according to DoD 4160.21-M and DoD 4160.21-M-1, are available in a variety of forms.

a. In the Army, demilitarization and disposal documentation is prepared as **DMWRs** by the **AMCCOM** Defense Ammunition Directorate or in technical manual **DMWRs** by the U.S. Army Missile **Command** Maintenance Engineering Directorate.

b. In the Navy, development of demilitarization and disposal documentation (**DMWRs**) is the responsibility of the Naval Sea Systems **Command**, SEA 642, Washington, DC 20632.

c. ~~in the~~ In the Air Force, demilitarization and disposal documentation **is prepared** as TOS by the Ogden Air Logistics Center, **MMWR**, Hill AFB, Utah 84056.

3. Demilitarization Technology Centers. Demilitarization equipment, tools, and process technology centers are:

For U.S. Navy activities, except when SMCA processes or equipment-are used, NAVSEASYSCOM, SEA-642, Washington, DC 20362.

b. For SMCA activities:

(1) U.S. Army Defense Ammunition Center and School, Savanna, IL 61074.

(2) Ammunition Equipment Directorate, **Tooele** Army Depot, UT 84074.

4. Demilitarization and Disposal Equipment Literature

a.. APE data are available in TM 43-0001-47. Copies of this Manual **are** available through normal supply channels.

b. Military Services' agencies designing or redesigning conventional ammunition shall, as a matter of policy, determine the availability of existing equipment, tools, processes, and procedures.

c. Military Services' agencies designing or redesigning conventional **ammunition** make their primary inquiries to the appropriate Military Service activities shown in subsection K.2., above, and the development commands or centers shown in subsection K.3., above. Based on these primary contacts, additional contacts may be made with Military Service activities performing demilitarization and disposal operations.